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PATENT

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In re Application of:

LIGNELL et al.

Group Art Unit: 1654

Serial No.: 10/088,496

Examiner: S. Coe

Filed: March 28, 2002

For: USE OF XANTHOPHYLLS, ASTAXANTHIN e.g., FOR TREATMENT OF  
AUTOIMMUNE DISEASE, CHRONIC VIRAL AND INTRACELLULAR  
BACTERIAL INFECTIONS

**RESPONSE TO RESTRICTION REQUIREMENT**

ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

Sir:

This is in response to the Official Action of February 7, 2003, in connection with the above identified application.

The Official Action is a restriction requirement in which it is urged that there are two separate and distinct inventions claimed in the present application. The Group I invention is drawn to a method of regulating immune responses and is said to include claims 9-17. The Group II invention is drawn to xanthophyll compositions and is said to include claims 18-25. Applicants elect to prosecute on the merits the Group I invention, drawn to a method of regulating immune responses which includes claims 9-17. This election is made without traverse.

It is also urged in the Official Action that the application contains claims directed to more than one species of the generic invention. It is stated that the species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept. The Examiner urges that the species are diseases selected from psoriasis vulgaris, multiple sclerosis, rheumatoid arthritis, crohn's disease, insulin-dependent diabetes mellitus, tuberculosis, transplant rejection, or HIV. Applicants do not agree that these represent patentably distinct inventions but in accordance with the requirement, Applicants elect with traverse crohn's disease.

Applicants most respectfully submit that there is unity of invention since all of these diseases cause excessive Th1 cell mediated immune responses and that the invention is directed to suppression of excessive Th1 cell mediated immune responses and stimulation of Th2 cell mediated immune responses. Accordingly, it is most respectfully requested that this requirement be withdrawn and all of the diseases be considered with the elected invention.

Applicants most respectfully request that the elected invention be examined on the merits taking into consideration the Information Disclosure Statement and the references cited in the International Search Report. Applicants would also appreciate an acknowledgment of the claim for priority and receipt of the priority document in this application.

An early and favorable action on the merits of all the claims now present in the application is most respectfully requested.

Respectfully submitted,

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February 26, 2003